The applicant, therefore, requests that the Examiner delete the entire specification and replace with the enclosed substitute specification.

IN THE CLAIMS-

To facilitate entry of the following changes, the Applicant has submitted herewith substitute pages providing all the pending/clean claims, as they now stand, incorporating the changes indicated below.

Amend the claims as follows:

- 1 --1. (amended) [In a] A non-planar log-periodic antenna
- 2 [of type] comprising two radiator arms oriented about a
- 3 common axis with and enclosing a square pyramidal conductor
- 4 with truncated tip.
- 2. (amended) An antenna as in claim 1 [Said antenna]
- wherein the arms are [composed of] low ohmic loss metal.
- 3. (amended) An antenna as in claim 1 [Said antenna]
 - wherein the arms are identical log-periodic shapes, inclined
- 3 by less than 30 degrees to each other, oriented to have 180
- 4 degree symmetry about the [said] common axis.
- 1 4. (amended) An antenna as in claim 1 wherein said [Said]
- 2 square pyramidal conductor comprises [made of] low loss
- 3 metal.

- .1 5. (amended) An antenna as in claim 1 [Said square
- 2 pyramidal conductor] wherein $\underline{\text{the}}$ axis of $\underline{\text{the}}$ pyramid and
- 3 said antenna arm pair are common.
- 1 6. (amended) An antenna as in claim 1 wherein the opening
- 2 angle of said [Said] square pyramidal conductor [wherein
- opening angle of same] is one half or less of the
- 4 inclination angle of said antenna arms.
- 7. (amended) An antenna as in claim 1 wherein said [Said]
- 2 square pyramidal conductor [wherein same] has identical
- 3 projected extent along the common axis as said antenna.
- 8. (amended) An antenna comprising two antenna arms and an
- 2 interior shield wherein the combination [Combination] of
- 3 said two antenna arms with said shield in the interior
- 4 [wherein the entire structure] behaves \underline{as} a log-periodic
- 5 antenna.
- 9. (amended) [The] A non-planar log-periodic antenna [of
- type] comprising four radiator arms oriented about a common
- 3 axis and enclosing a square pyramidal conductor with
- 4 truncated tip.
- 1 10. (amended) [The said combination wherein] An antenna as
- 2 in claim 8 further comprising a short wire [is] attached to
- 3 the narrow end of each \underline{of} said antenna \underline{arms} , at an endpoint
- of the [said] antenna arm centerline, and threaded into
- 5 [the] said square pyramidal conductor through said truncated
- tip of [the] said square pyramidal conductor.